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## PATENT SPECIFICATION

DRAWINGS ATTACHED.

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### COMPLETE SPECIFICATION.

#### Improvements in Interior Rear-View Mirrors and Lamps for Vehicles.

We, WINGARD LIMITED, a British Company, of Kingsham Road, Chichester, Sussex, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to improvements in combined interior rear-view mirrors and lamps for vehicles.

In the Specification of our Patent No. 970,125 we have claimed in Claim 1 a swivelling joint for connecting a rod or arm to another part comprising a base or attachment part moulded from plastic having a certain degree of resilience and having integral with it a hollow open-ended one-piece socket incorporating an internal part-spherical seating in which a ball head on the rod or arm is frictionally gripped in combination with a substantially rigid sleeve of which the length is greater than the full length of the part-spherical seating and which, after insertion of the ball head, is detachably fitted over the exterior of the socket at a position such that the sleeve supports the internal part-spherical seating, the arrangement being such that the frictional grip of the socket on the ball head is enhanced by the sleeve which also prevents removal of the ball head from the socket so long as the sleeve is in position.

According to our present invention a swivelling joint as claimed in Claim 1 of Patent Specification No. 970,125 is employed for connecting an interior rear-view mirror to an interior lamp for a vehicle.

This greatly simplifies manufacture and assembly and has the advantage that in the event of an accident the mirror can break away from the lamp and the risk of injury to the occupants of the vehicle is eliminated or minimised.

Two practical embodiments of our invention are illustrated by way of example in the accompanying drawings in which:—

Figure 1 is a plan view of an interior lamp for a vehicle combined with a mounting base for an interior rear-view mirror;

Figure 2 is a section of the base and lamp;

Figure 3 is a section of a combined mirror and lamp; and

Figure 4 is a section on the line 4—4 of Figure 3.

In the arrangement shown in Figures 1 and 2, 10 is a moulded plastic base adapted to be secured by screws passing through holes 11 to a convenient part of a vehicle such as the front cross-member or header rail of the roof structure. The base carries contacts or mounting strips 12 for a lamp bulb 13 of the festoon type. It also has on its outer face an integral hollow open-ended socket 14 having an internal part-spherical recess to receive a ball end 15 of an arm 9 adapted to carry a mirror head.

A hollow transparent or translucent plastic lens or cover 16 fits over the base and has moulded integrally with it a sleeve 17 adapted to engage over the socket 14 on the base.

The external surface of the socket 14 is tapered in diameter from its junction with the base 10 to a point short of its free end where there is a reversely tapered portion 18 of short axial length, and the sleeve 17 has an internal surface which is complementary to the external surface of the socket whereby, when the sleeve is pressed fully home over the socket, it snaps into position and is retained by the reversely tapered portion 18 of the socket as shown in section in Figure 2.

To assemble the mirror and lamp it is only

necessary to thread the ball end 15 on the arm 9 through the sleeve 17, insert the ball end into the socket 14, and press the lens or cover 16 down on to the base so that the sleeve part 17 on the lens snaps into engagement with the socket 14.

The lens is thus securely held to the base and at the same time the ball end on the mirror arm is securely retained in the socket 14.

Wiring for the lamp can be brought in through the base which may incorporate a switch.

In the arrangement shown in Figures 3 and 4 a mirror glass 21 is mounted in a moulded plastic back or case 22 incorporating an integral socket 23 adapted to receive a ball end 24 of a mounting arm 25. A transparent or translucent plastic lens 26 housing contacts 27 for a lamp bulb 28 incorporates an integral sleeve 29 adapted to snap over the socket 23 and so connect the lens to the case 22 and the case to the arm 25. Wiring 31 for the lamp can be brought through the mounting arm 25 as shown in Figure 4, and a switch may be incorporated in the lens or cover.

#### WHAT WE CLAIM IS:—

1. A combined interior rear-view mirror and lamp for vehicles in which a transparent or translucent lens or cover of a lamp is detachably secured to a moulded plastic mounting base for a mirror or to a moulded

plastic back or case of a mirror by means of a sleeve integral with the lens or cover and adapted to engage over a hollow open ended socket which is integral with the base or case and receives a ball end of a mounting arm, the sleeve and socket providing a swivel joint of the form claimed in claim 1 of Patent Specification No. 970,125.

2. A combined interior rear-view mirror and lamp for vehicles as claimed in Claim 1 in which the lens or cover is secured to a base carrying contacts or mounting strips for a lamp bulb which is housed within the lens or cover.

3. A combined interior rear-view mirror and lamp for vehicles as claimed in Claim 1 in which the lens or cover houses contacts or mounting strips for a lamp bulb and is secured to the back or case of a mirror.

4. A combined interior rear-view mirror and lamp for vehicles substantially as described with reference to Figures 1 and 2 of the accompanying drawings.

5. A combined interior rear-view mirror and lamp for vehicles substantially as described with reference to Figures 3 and 4 of the accompanying drawings.

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COMPLETE SPECIFICATION

1 SHEET

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